



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,846	12/03/2001	Khuy V. Nguyen	2000.83	1022
29494	7590	11/03/2006		
HAMMER & HANF, PC			EXAMINER	
3125 SPRINGBANK LANE			CHANG, VICTOR S	
SUITE G				ART UNIT
CHARLOTTE, NC 28226				PAPER NUMBER
			1771	

DATE MAILED: 11/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/005,846  
Filing Date: December 03, 2001  
Appellant(s): NGUYEN ET AL.

**MAILED**

NOV 03 2006

**GROUP 1700**

---

Scott Hanf  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 6/13/2005, and a Panel Remand by the BPAI dated 9/8/2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

JP 10-017694

Kondo, et al.

1-1998

**(9) Grounds of Rejection**

In view of the remand by BPAI, the grounds of rejection of claims 1-3 and 6-11 have been rewritten as 102(b)/103(a) rejections, based on the same prior art reference JP 10-017694. The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 10-017694 [computer translation].

JP '694 is directed to obtain a microporous polyethylene membrane which can be desirably used as a battery separator. The membrane comprises polyethylene (PE, an aliphatic polyolefin), and blends with less than 30% EPR (ethylene-propylene rubber), etc., may also be used [abstract; paragraph 0013]. Further, JP '694 teaches a method for producing the microporous membrane comprises three steps: 1) Forming a starting sheet of polymer/plasticizer blend, 2) Stretching, and the stretching method is not limited, biaxial stretching with tenters (a dry stretched process) is preferred, 3) Extraction [paragraphs 0016-0019].

For claims 1-3 and 6-11, appellants' claimed process is a method that is embodied by a single step, that being providing a specific microporous sheet. Since JP '694 provides such a sheet, the claims are determined to be anticipated, despite the extra verbiage in the preamble regarding improving mechanical strength of a membrane. As to the amount of EPR in the blend, JP '694 is silent about the basis of the percentage, however, in view of the fact that all the examples in JP '694 are based on parts of components, or weight based, it is reasonable to interpret the blend percentage is also weight based. Hence, since JP '694 teaches that blends of polyethylene with less than 30% of EPR by weight (which is equivalent of blends of polyethylene with 0 to 30% of EPR by weight) can be used to make the membrane, the teaching of JP '694 clearly overlaps the instantly claimed range of claim 1: "a blend of an aliphatic

Art Unit: 1771

polyolefin and a thermoplastic olefin elastomer selected from the group of ethylene-propylene rubbers ... with the elastomer comprising less than 10 percent by blend weight" (which is equivalent to comprising 0 to 10% of elastomer, such as EPR, by weight). In other words, a suitable amount of EPR in the blend, including less than 10% by weight, is reasonably considered to be either anticipated by JP '694, or a matter of obvious optimization, motivated by the desire to obtain required amount of beneficial effect of using a blend.

For claims 4 and 5, JP '694 is silent about the Gurley value of the microporous membrane. However, since JP '694 does teach the same subject matter for the same application (a microporous membrane used as a battery separator) as the instant invention [abstract of JP '694; specification of present application, page 4, lines 18-19], a suitable Gurley value is reasonably considered to be either anticipated by JP '694, or an obvious optimization, motivated by the desire to provide required permeability for use as a battery separator.

#### **(10) Response to Argument**

Appellants argue at page 9 that the JP '694 reference fails to teach a method of improving the mechanical strength of a membrane, and does not suggest that there is any benefit what so ever of adding an elastomer to the polyethylene. However, there is no requirement that such alleged benefit be disclosed in the prior art. The prior art was shown to provide the same structure and chemistry as claimed. If some benefit is associated with the addition of elastomer to the PE, it must be inherent to JP '694, because the reference anticipates the combination. Stated another way, the mere recognition of latent properties in the prior art does not render nonobvious an otherwise known invention. MPEP § 2145.II.

Appellants argue at pages 10-11, bridging paragraph, that in claim 9 the clause of the claim, “a dry stretched microporous sheet” is a structural term, which defines the microporous sheet as a particular type of microporous sheet; and points to a reference Synthetic Polymer Membranes A Structural Perspective by Kesting as evidence that the method of present application is different from the solvent extraction technique of JP ‘694, and they produce microporous sheets having physical differences in the end products”. However, while the specification of the instant invention describes a process which does not require extraction, nowhere is the phrase “dry stretched” explicitly defined in the specification, nor does Kesting’s teaching define the phrase “dry stretched” as a specific process method. It should be noted that although the claims are interpreted in light of the specification, in the absence of an explicit definition, limitations from the specification are not read into the claims. Further, appellants are reminded that JP ‘694 does teach a “dry stretched” step prior to solvent extraction, and reads on instant invention as claimed. Finally, even if the phrase “dry stretched” is interpreted as a structure effecting product-by-process limitation, appellants have failed to provide any evidentiary support that the resultant microporous membranes obtained by these “dry stretched” methods are structurally distinct from each other.

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner’s answer.

For the above reasons, it is believed that the rejections should be sustained.

This examiner’s answer contains a new ground of rejection set forth in section (9) above.

Accordingly, appellant must within **TWO MONTHS** from the date of this answer exercise one

Art Unit: 1771

of the following two options to avoid *sua sponte* dismissal of the appeal as to the claims subject to the new ground of rejection:

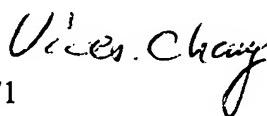
(1) **Reopen prosecution.** Request that prosecution be reopened before the primary examiner by filing a reply under 37 CFR 1.111 with or without amendment, affidavit or other evidence. Any amendment, affidavit or other evidence must be relevant to the new grounds of rejection. A request that complies with 37 CFR 41.39(b)(1) will be entered and considered. Any request that prosecution be reopened will be treated as a request to withdraw the appeal.

(2) **Maintain appeal.** Request that the appeal be maintained by filing a reply brief as set forth in 37 CFR 41.41. Such a reply brief must address each new ground of rejection as set forth in 37 CFR 41.37(c)(1)(vii) and should be in compliance with the other requirements of 37 CFR 41.37(c). If a reply brief filed pursuant to 37 CFR 41.39(b)(2) is accompanied by any amendment, affidavit or other evidence, it shall be treated as a request that prosecution be reopened before the primary examiner under 37 CFR 41.39(b)(1).

Extensions of time under 37 CFR 1.136(a) are not applicable to the TWO MONTH time period set forth above. See 37 CFR 1.136(b) for extensions of time to reply for patent applications and 37 CFR 1.550(c) for extensions of time to reply for ex parte reexamination proceedings.

Respectfully submitted,

Victor S Chang  
Examiner, Art Unit 1771

A handwritten signature in black ink, appearing to read "Victor S Chang".

Art Unit: 1771

**A Technology Center Director or designee must personally approve the new  
ground(s) of rejection set forth in section (9) above by signing below:**

Marian Knode



TERREL MORRIS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700

Conferees:

Terrel H. Morris



Carol D. Chaney

